

## IHE QRPH Technical Framework Supplement: Family Planning

## Purpose of this Guide

This guide is intended to aid family planning and technical subject matter experts in reviewing the 2014 *IHE QRPH Technical Framework Supplement: Family Planning* (i.e., the **Family Planning (FP) Profile**) during the public comment period.

IHE (Integrating the Healthcare Enterprise) is a standards development organization that helps improve how computer systems in healthcare share data. QRPH (Quality, Research, and Public Health) is a committee within IHE USA. QRPH's Technical Framework includes implementation guides to help electronic systems exchange healthcare information using standards and examples. The Family Planning Profile helps define how information should be formatted for quality and performance metrics in this clinical specialty. Vendors of electronic health record (EHR) systems will develop a mechanism to exchange the data described in the profile; their ability to send data in the way this profile describes will be validated by independent testing authorities.

## **Goal of the Family Planning Profile**

The goal of the Family Planning Profile is to clearly define the basic data elements of family planning clinical services necessary to satisfy quality and performance metrics as well as to define a reasonable format that will allow many different systems to exchange those data elements. The US Title X Family Planning program, administered by the Office of Population Affairs (OPA), views this profile as just one method of sending the minimum basic data elements from Title X- funded service sites' electronic systems to a future reporting and performance management system. To the extent possible, the FP specifications rely on data already entered into a clinics' EHR system during typical clinical workflow patterns. Additional mechanisms for sharing data will likely be necessary moving forward (e.g., queries based on billing or diagnostic codes that generate a batch file of family planning encounters and are then sent to the future system). The profile is an electronic version of the various paper forms that may have been used prior to the advent of EHRs to help clinical staff record all the information about a single family planning encounter in one place.

The profile is organized into an introduction (starting on page 6) and 4 accompanying volumes. Volume 1 describes the profile's overall goals and vision (page 11), Volume 2 describes Transactions (page 28), Volume 3 describes Content Modules (page 30), and Volume 4 describes the National Extension (or country-specific uses for the profile; page 44).

Feedback from clinical and technical experts will be essential for all sections but we suggest that healthcare providers and other family planning experts focus on the Introduction, Volume 1, and Volume 4. Technical experts knowledgeable about templates, mapping to CDA, and terminology bindings may wish to focus on Volumes 3 and 4.

Readers new to IHE documentation may wish to review OPA's Annotated Family Planning Profile.



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## I only have 20 minutes and want to participate - what should I do?

If you are have limited time but want to participate, please submit public comments after reviewing these 3 things:

- 1. **Generic Family Planning Encounter Form** (page 24, Volume 1 Appendix A): Review the sample form, all the data elements, and all the options for the data elements.
- 2. **Data Element Table** (page 25, Volume 1 Appendix B): Review the data element definitions.
- 3. **Support family planning performance measures**: Consider these issues when formulating your comments: Would these data elements be useful for meaningful family planning performance measures? If these data elements are standardized in all EHR systems, will that help you better measure your own performance?

**Bonus Points**: Forward all the information to your "go-to" person for health IT. This could mean health IT and EHR vendors and/or resellers, in-house health IT staff, or health IT consultants. Ask your health IT resources to submit public comments as well.

Place your comments in the Excel file's Narrative Comment Form tab and email it to <a href="mailto:qrphcomments@googlegroups.com">qrphcomments@googlegroups.com</a>.



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If you are a family planning clinical provider or quality improvement expert:

#### **Focus on these Sections:**

Volume 1 – page 11

Volume 4 – page 44

Generic Family Planning Encounter Form - Volume 1 Appendix A, page 24

Data element definitions - Volume 1 Appendix B, pages 25-26

The comments in the Annotated Family Planning Profile labeled PLEASE COMMENT are intended to prompt the public to consider the following issues when formulating your comments:

- How will providers outside of family planning benefit from EHR systems with functionality based on the FP profile? Are these data elements in the service of performance measures (see below) useful across many practice types?
- How does your clinic record insurance for individuals requesting a confidential visit?
- Are there other use cases you feel should be considered? Are the use cases representative of existing or desired processes in family planning clinical settings?
- What templates do you currently use that hold the same data elements described in the profile?
  Can you work with your EHR or IT provider to document the template IDs used in your system for the same data elements? Please provide information about alternative template IDs used to record the same kinds of data elements.
- What are your concerns related to how vendors would implement the opening or triggering of the Family Planning form? In an ideal world, how would you like to report encounter-level data?
- Do you anticipate sending encounter-level data to an intermediary (grantee, Health Information Exchange)?
- How well can providers that have not traditionally focused on the family planning specialty relate to these data elements and performance measures?
- For overachievers: Review and comment on the value options in the FP Encounter Form, further described in Volumes 3 and 4 (Tables in section 6.5 List of Concept Domains starting on page, 4.R1.3 value set for Race, Ethnicity, and Payers starting on page 26).



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## **Key National Performance Measures**

- 1. Proportion of sites that dispense or provide on-site a full range of contraceptive methods
- 2. Proportion of female clients < 25 years who were identified as sexually active and who had at least one test for Chlamydia during the measurement year
- 3. Proportion of clients ≥18 years of age who had their BMI documented during the measurement year.
- 4. Proportion of clients who were screened for hypertension during the measurement year.
- 5. Proportion of clients who were screened for tobacco use during the measurement year.
- 6. Proportion of clients who stated clear childbearing intentions.
- 7. Proportion of female clients at risk of unintended pregnancy who adopt or continue use of the most effective or moderately effective FDA-approved method of contraception.
- 8. Proportion of female clients aged 15-44 years who received contraceptive services in the past 12 months, that adopt or continue use of FDA-approved methods of contraception that are:
  - a. Tiered by effectiveness:
    - i. Most effective: male or female sterilization, implants, intrauterine devices (IUDs) OR
    - ii. Moderately effective: injectables, oral pills, patch, ring, diaphragm
  - b. Long-acting reversible methods of contraception (LARC): implants, intrauterine devices (IUDs)



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If you are a technical expert familiar with CCD and CDA, software engineering of ambulatory EHR systems, semantic interoperability, or implementations of EHR systems in ambulatory settings:

Focus on these Sections: Volume 1 (p.11), 3 (p. 30), 4 (p. 44), ITI's <u>Technical Supplement</u> about RFD, Choice of templates, value sets, and codes

Please see the comments in the Annotated Family Planning Profile labeled SEEKING TECHNICAL COMMENT and consider the following in formulating your comments:

- What percentage of common data elements could you provide for the CCD pre-population? Would any be null for reasons related to unstructured data or reasons not related to the information not being captured by clinical staff and placed in structured data in your system?
- What problems might you anticipate with generating a CCD and a CDA?
- Do you anticipate problems with saving an incomplete form?
- How can semantic interoperability be better achieved with code sets (tests ordered, contraceptive methods, etc.)? Are there codes that would apply to concepts with missing code sets?
- Do you anticipate problems with ordering contraceptive methods?
- Does your system already contain all the data elements described? If not, which ones are missing?
- Do you have recommendations for testing conformance to the profile, typical errors that might be encountered as a result of how this profile conceptualizes data formats and exchange, or general concerns about rigorously testing data exchange?
- Are there processed associated with tailoring implementations of your system that might limit semantic or syntactic interoperability?
- Is your system already capable of performing the ITI-34 and ITI-35 transactions?
- Is your system capable of triggering the request for a form based on diagnostic or billing codes or would this have to be done manually by a user?
- Are there data elements described in the profile that are not traditionally available as structured data in your system?
- Are the template ids identified in the profile used by your systems at family planning service delivery sites and do they contain the kinds of data elements described?
- Are you currently experiencing problems using the code systems or structures referenced in the profile?
- Are there implementation standards for all vendors helpful when tailoring systems that should be considered in concert with mapping specifications?



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## Glossary of Terms Found in the IHE Profile

Actors: DOES NOT REFER TO PEOPLE, REFERS TO SYSTEMS. This comes from software engineering and how that field models software development. It sounds weird and it isn't very friendly to outsiders but it works when you know it. It comes from the Unified Modeling Language (UML). It is supposed to be a generic way of describing the roles of users or computer systems when they interact and exchange information and to facilitate standardized, graphical diagrams of actors and their interactions. IHE prefers to stress systems and doesn't like user-oriented diagrams or workflow diagrams. That is frustrating. Asking for more modern and user-friendly diagrams wouldn't hurt in public comments.

**CDA**: Clinical Document Architecture is, by definition, US-specific. It is a method to share clinical summaries about a patient and services between providers. Vendors have varying opinions on how easy it is to implement. Consolidated CDA (C-CDA) is an attempt to make implementation easier. In general, CDA is a standardized way to format and deliver structured information so that computers can understand it and so that they can display information in a way that allows people to read it easily. In the real world, it would be like reviewing a patient's medical chart and writing up a new summary related to the referring issue to send to another provider and signing off with appropriate medico-legal authorizations.

**Content Modules**: Refers to the contents of data exchange – for us that means the kind of data elements and their values we want to send and receive.

**Form Filler**: Refers to the role played by an EHR system. This system must be able to send a request to the Form Manager or Form Processor to receive the Family Planning form, save the form data, and submit the form data in the formats described in the profile.

**Form Manager**: Refers to the role played by a system that hosts the Family Planning form specifications (e.g., a service from a national or state system, Health Information Exchange, the same EHR system as the Form Filler if data are kept just within the provider's practice).

**Form Processor**: Refers to the role played by an integrated system that hosts the Form Manager and the Form Receiver.

Form Receiver: Refers to the role played by a system that receives the Family Planning form data.

FP: Family Planning

IHE: Integrating the Healthcare Enterprise, a volunteer-based standards development organization

**LOINC**: Logical Observation Identifiers Names and Codes (LOINC) from the Regenstrief Institute <a href="http://loinc.org/">http://loinc.org/</a>. A universal standard to encode the meaning of medical and laboratory observations, often used to encode "the question" that might be asked in a healthcare setting.



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## **Optionality Column in Tables:**

**R**: Required

**R2**: R2 implies required if something else is done, like a skip pattern. If you answer yes to Q1 then you must also answer Q1a. If you say no to Q1 then you don't have to answer Q1a.

O: Optional, meaning \*not\* required

**OID**: Object Identifier a unique set of numbers, separated by dots, assigned to something to keep track of it and helps one computer say, "I want this specific thing", and for the responding system to know exactly what to return. Like an SSN for electronic entities. This is the Family Planning OID: 1.3.6.1.4.1.19376.1.5.3.1.1.24

**PHIN VADS**: Public Health Information Network Vocabulary Access and Distribution System (PHIN VADS) from CDC <a href="https://phinvads.cdc.gov/vads/SearchVocab.action">https://phinvads.cdc.gov/vads/SearchVocab.action</a>. Public resource to document standard code sets like race, health insurance.

**Pre-pop**: A Form Filler supplies data and the Form Manager or Form Processor uses this information to determine what form is returned and what data is already populated in the form fields, as defined in the Family Planning content profile.

**QRPH**: The Quality, Research, and Public Health committee in IHE.

**RFD**: Retrieve Form for Data Capture - defined as "method for gathering data within a user's current application to meet the requirements of an external system. RFD supports the retrieval of forms from a form source, display and completion of a form, and return of instance data from the display application to the source application". It is commonly used to exchange form data over the internet.

**SNOMED-CT**: Systematized Nomenclature of Medicine Clinical Terms (SNOMED-CT) from the International Health Terminology Standards Development Organisation <a href="http://www.ihtsdo.org/snomed-ct/">http://www.ihtsdo.org/snomed-ct/</a>. A comprehensive clinical terminology standard used to encode the meaning of healthcare concepts, often used to encode "the answer" to a question in a healthcare setting.

**Template ID**: "A template is a collection of business rules which are applied to part of a document or message and which are defined to meet the needs of a specific use case." (See Boone, KW. 2011. *The CDA*<sup>TM</sup> *Book*. page 263.) The id, or identifier, of a template refers to a set of numbers that uniquely identify the template.

**Transactions**: Transactions refers to the way in which data are transmitted BETWEEN SYSTEMS. If you went to the deeper documentation of RFD you would see that the expected transactions (ITI-34 and ITI-35) are, by default, web services. This involves URLs, HTTP, XML, XHTML. It can be triggered by a human requesting the FP form or through some systematic means (like a set of ICD codes that would trigger the request).

**Use Case**: The narrative, story-telling version of the specific issues and context that are visually represented in the UML diagrams. This method in software engineering really gained steam in the late 90s, personalizes things, helps explain the whole system and problem to a programmer. It helps ensure



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that everyone on a project (user, manager, programmer, database engineer) can see the problem in the same way by telling a story.

**Volume 1**: Volume 1 is supposed to explain the overall goals and design of how systems will exchange data, explain background information, etc. It should be clear to most audiences.

**Volume 2**: Volume 2 describes new transactions. It is not applicable in our case.

**Volume 3**: Volume 3 describes the content of the data packages being exchanged between systems, how they map to what we want, etc.

**Volume 4**: Volume 4 is intended to describe the specific considerations or instructions for how this profile is supposed to operate in a given country. We have described the Title X and US example. Other countries will be able to add their own instructions to describe their specific context and requirements.